

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered). None of the claims have been amended, canceled, or added herein. A listing of the claims is included for the Examiner's convenience.

1. (original) A method for encrypted transmission of communication data streams, present as a sequence of IP data packets, via a packet-oriented communication network, comprising:

forming collective Internet Protocol data packets, each containing several Internet Protocol data packets of different communication data streams;

encrypting each collective Internet Protocol data packet by an encryption module to form encrypted collective Internet Protocol data packets; and

transmitting the encrypted collective Internet Protocol data packets via the packet-oriented communication network.

2. (original) A method in accordance with claim 1, wherein the encrypted collective Internet Protocol data packets are transmitted by an encrypted tunneling method on a network layer of an OSI reference model.

3. (original) A method in accordance with claim 2, wherein said forming comprises: determining which of the different communication data streams have a common transmission destination, and

forming at least one collective Internet Protocol data packet from Internet Protocol data packets of communication data streams with a common transmission destination.

4. (original) A method in accordance with claim 3, wherein said determining and forming are performed on the Internet Protocol data packets of the different communication data streams that occur within a specified time interval.

5. (original) A transmission device for encrypted transmission of communication data streams present in each case as a sequence of Internet Protocol data packets via a packet-oriented communication network, comprising:

- a collective packet generator forming collective Internet Protocol data packets, each containing several Internet Protocol data packets of different communication data streams;
- an encryption module encrypting at least one of the collective Internet Protocol data packets; and
- an Internet Protocol interface transmitting encrypted collective Internet Protocol data packets via the communication network.

6. (original) A transmission device in accordance with claim 5, wherein said encryption module includes an encapsulation module encapsulating data of a first Internet Protocol data packet encrypted in the encryption module into a second Internet Protocol data packet.

7. (original) A transmission device in accordance with claim 6, wherein said collective packet generator comprises:

- an address comparison device determining which of the different communication data streams have a common transmission destination; and
- a collective packet generation device forming the collective Internet Protocol data packets, each containing Internet Protocol data packets of the different communication data streams having the common transmission destination.

8. (original) A transmission device in accordance with claim 7, further comprising a timer for setting a time interval, with the Internet Protocol data packets of the different communication data streams that occur within the time interval being combined to form a collective Internet Protocol data packet.